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Let me add my welcome to the first NIH Consensus Conference on Dental Caries. The National Institute of Dental and Craniofacial Research (NIDCR) has focused considerable effort on dental caries since its founding more than 50 years ago. Indeed, NIDCR was founded primarily on the basis that American military recruits in W.W.II often suffered from serious dental caries problems that frequently compromised combat readiness. So, while it is surprising that this is the first time there has been a Consensus Development Conference on dental caries, it does help to explain why the agenda for our discussions in the next three days must be so broad.

What a conference this portends to be! The enormous scope of our deliberations will be much wider than a typical consensus conference with discussions of dental caries etiology, diagnosis, prevention, and treatment from conception through senescence. We will explore the science behind the genetic, developmental, dietary, behavioral and microbiological aspects of the disease, as well as the clinical implications of risk assessment, diagnosis, prevention and management of dental caries. Finally, we will engage many, but not all, of the emerging technologies in caries diagnosis and disease management. You will likely notice that there is more focus on the dental office issues and procedures than on public health measures such as fluoridation. These public health measures are extremely important, and their lack of emphasis here merely reflects the fact that they have been the subject of many public meetings.

Let me pause for a minute here to give my fellow panel members the opportunity to introduce themselves. We have divided the panel into subcommittees based on the 6 questions posed as follows:

1. What are the best methods for detecting early and advanced dental caries?
Drs. Alan Lurie and Clay Walker [Chair]
2. What are the best indicators for an increased risk of dental caries?
Drs. Peter Imrey, Thomas Hart and Roy Page [Chair] and also Co-Chair of the Panel
3. What are the best methods available for the primary prevention of dental caries initiation throughout life? Drs. Joseph Levy, Meghan Gerety, and Linda LeResche[Chair]
4. What are the best treatments available for reversing or arresting the progression of early dental caries? Drs. Ian Coulter and Russell Luepker [Chair]
5. How should clinical decisions regarding prevention and/or treatment be affected by detection methods and risk assessment? Drs. Lucille Smith and Leslie Rye [Chair]
6. What are promising new research directions for the prevention, diagnosis, and treatment of dental caries? The entire panel, Dr. Michael Alfano [Chair]

For those of you who have never been to a Consensus Conference, let me take a few minutes to explain the process. First, there was a Planning Committee selected by representatives of the NIH which included independent experts in dental caries, as well as representatives from the NIDCR, the National Institute on Allergy and Infectious Diseases, the National Institute on Aging, the Office of Medical Applications of Research [OMAR] and the FDA. This planning group developed the six questions we will be discussing as well as the names of potential speakers and panelists.

Next, representatives of OMAR and NIDCR selected the speakers and the panelists. And I think that this would be a good time to point out that the speakers were selected because of their expertise in dental caries, but panel members were selected because of their expertise in related disciplines like epidemiology, microbiology, pediatrics, geriatrics and so forth. Panelists, by design, cannot have focused their careers on dental caries. This is done to ensure that no personal biases are introduced into the Panel Report. NIDCR then commissioned several reviews of the topic, including one Evidenced Based Review on certain of the questions.

Panelists were then assigned to subcommittees on each of the questions, and sent copies of review papers beginning about two months ago. The Panel met one time in late February to discuss the process we would be using at this meeting. At that meeting, the Panel thought you should know that this Conference is transitional in format because in the future, OMAR will commission all reviews to be done by the evidenced based technique. For this conference only a few of the reviews were done in this manner. In addition, the Panelists noted that one of these reviews required the high standard of histological validation of caries status in grading the reviewed studies which, of course, requires the extraction of teeth. In addition, time and financial constraints limited the review to the English language literature only.

Finally, you should be aware of the following facts:

1. This is a public meeting.
2. The Panel Statement will be based on evidence presented to the Panel prior to and during this meeting.
3. The meeting will focus on the six previously posed questions, and the scientific information that will enable the panel to answer them.
4. We will adhere to the schedule.
5. The statement resulting from this conference is that of an independent panel, not of the NIH. The report is not a policy statement of the NIH. The Panel is not an advisory body to the NIH.